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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/055,560

01/22/2002

Mou-Shiung Lin

JCLA8532

6103

7590

12/08/2005

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EXAMINER

MITCHELL, JAMES M

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/055,560	Applicant(s) LIN ET AL.	
	Examiner James M. Mitchell	Art Unit 2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 242-244 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 242-244 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to applicant's amendment filed September 14, 2005.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 242-244 are rejected under 35 U.S.C. 102(e) as being anticipated by Towle et al. (U.S. 2002/0074641).

Towle (Fig. 17, 22, 32-34) discloses a chip packaging method comprising joining at least a die (314) having a top surface at a horizontal level to a substrate (302), after joining, depositing metallization/ trace (120) over said horizontal level (e.g. above chip) separated by dielectric layer that form a passive device¹ (capacitance) over the said substrate, horizontal and separating said substrate ("singulated"; Par. 0047); with the passive over the horizontal (i.e. match where top of die is level with top of substrate); and depositing a dielectric (124) over horizontal followed by at least one trace (120); whereby said trace extends to a place under which said die does not exist (e.g. wiring connected to outermost balls extends past die).

¹ Newly cited reference e.g. Lin (U.S. 6,657,310) is provided to further evidence wiring separated by dielectric producing capacitance.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 242-244 are rejected under 35 U.S.C. 102(e) as being anticipated by Tabrizi (U.S. 6,867,499).

Tabrizi (Fig. 2, 4, 5) discloses a chip packaging method comprising joining at least a die (520) having a top surface at a horizontal level to a substrate (500), after joining, depositing metallization/ trace (560) over said horizontal level (e.g. above chip) forming a passive device over the said substrate, horizontal level (e.g. in "redistribution or additional dielectric"; (Col. 5, Lines 1-4) layer, and separating said substrate ("form multiple electronic components"; Col. 1, Lines 45-46); with the passive over the horizontal (e.g./ passive in redistribution layer, 560,570); and depositing a dielectric (passivation not labeled covering pad, 540 & 550, 570) over horizontal followed by at least one trace (120); whereby said trace extends to a place under which said die does not exist (e.g. wiring connected to outermost balls, 580 that extends past die).

Response to Arguments

Applicant's arguments filed September 14, 2005 have been fully considered but they are not persuasive. A second rejection was provided in order to expedite prosecution, in the event that applicant was able to properly overcome Towle.

In regards to Towle, applicant argues that he disagrees that wiring separated by insulating forms capacitors, because the prior art does not indicate a capacitor. Examiner respectfully disagrees and has cited several references for the purpose of showing that wiring separated by dielectric produces capacitance irrespective of if Towle mentions it. Furthermore absent some extrinsic evidence applicant's mere arguments cannot overcome a prima facie case of obviousness. The arguments of counsel cannot take the place of evidence in the record. See *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP. § 716.01(c).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art discloses in Lin (U.S. 6,657,310), Sullivan (U.S. 6,333,557) and Cronin (U.S. 5,668,399) capacitors/capacitance formed by wiring separated by dielectric material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Mitchell whose telephone number is (571) 272-1931. The examiner can normally be reached on M-F 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Whitehead Jr. can be reached on (571) 272-1702. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jmm

November 26, 2005

Carl Whitehead, Jr.
CARL WHITEHEAD, JR.
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800